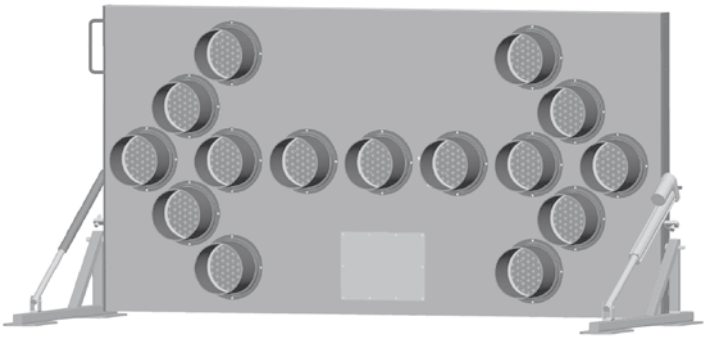
Australian Arrow Boards

User Manual



A Board
AAB-AB / AAB -AB-DBL

B Board
AAB-BB / AAB-BB-DBL

C Board
AAB-CB

R T A
FAS/5

N24440

Introduction

Thank you for purchasing an
Australian Arrow Boards product.

For installation instructions please
refer to the
Australian Arrow Boards
Installation & Repair manual.

Australian Arrow Boards products conform to:

Australian Standards AS4192-2006

NSW RTA FAS/5

A Board 1005-FAS5-01A
B Board 1005-FAS5-01B

C-Tick No. N24440

Lamps NATA Certified Report No. V080404/03

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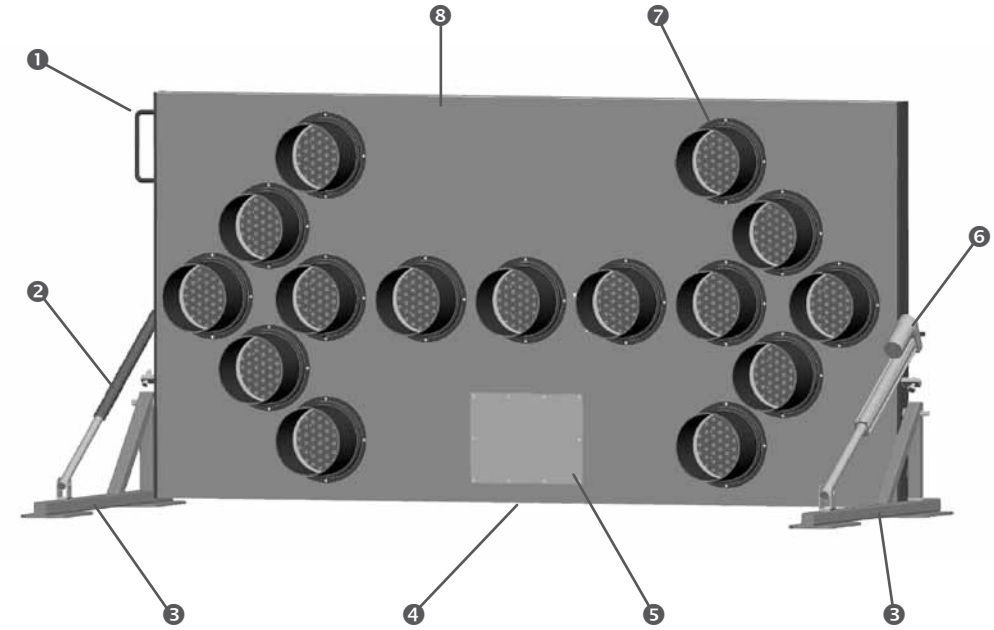
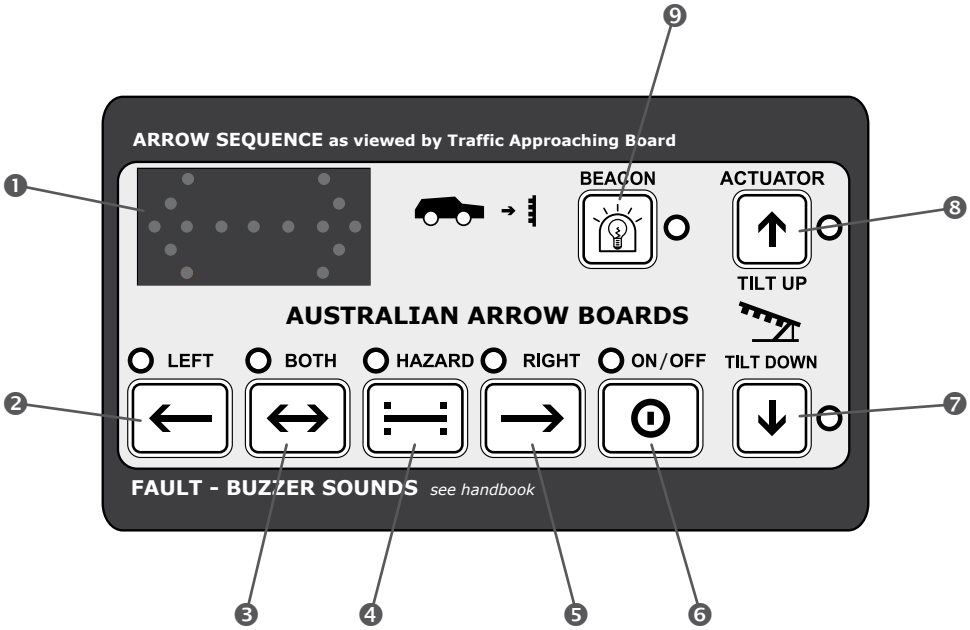
Arrow Board

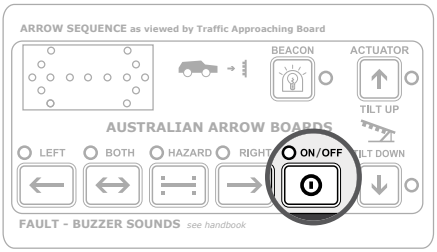


❶	-	Integrated Handle
❷	-	Gas Ram
❸	-	Board Rack Assembly (Optional)
❹	-	Light Sensor
❺	-	Access Panel to Control Board
❻	-	Electric actuator (Optional)
❼	-	LED Lamp with Visor
❽	-	Board Housing



❶ - Selected Sequence Display
❷ - Left Arrow
❸ - Both Arrows
❹ - Hazard
❺ - Right Arrow
❻ - Board On/Off
❼ - Actuator Tilt Down (Optional)
❽ - Actuator Tilt Up (Optional)
❾ - Beacons On/Off (Optional)

Operation - Single Sided



Turn on Board

❶ Press once to activate arrow board & controller.

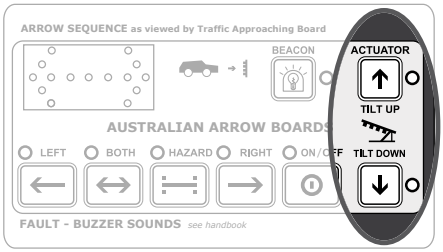
(Illuminated LED indicates power on)

❷ Press again to turn board off.

NOTE:

The controller will emit a feint beeping until it is turned on, if it senses a power supply.

Tilt Board Up/Down - Rack Mounted Boards Only



Electric operation (optional)

❶ Press once to activate electric actuator.

(Flashing LED indicates actuator in operation)

(Steady on LED indicates actuator operation has stopped)

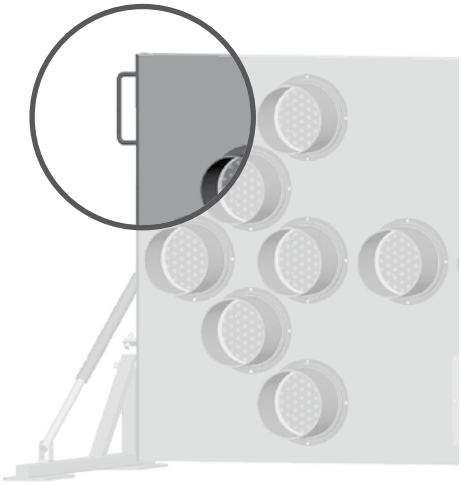
NOTE:

Pressing the Tilt Up or Down button whilst the actuator is in motion will stop the board in it's current position.
Recommence or change direction by pressing the desired button once.

Caution:

Always check to make sure there are no obstructions before tilting the board up or down.

Tilt Board Up/Down - Rack Mounted Boards Only (cont.)



Manual operation

Tilt Up

❶ Using the handle integrated into the passenger side of the board, push with a steady motion until the gas strut takes the weight of the board and guide the board gently into it's upright position.

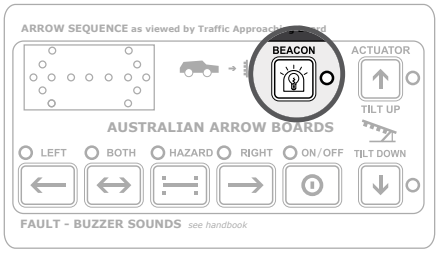
Tilt Down

❶ Using the handle integrated into the passenger side of the board, pull back with a steady motion until the gas strut releases the weight of the board and guide the board into it's down position.

Caution:

DO NOT release the handle and let the board 'crash' into position.
This will reduce the life expectancy of your arrow board and damage incurred by such operation will not be covered under warranty.

Operation - Single Sided (cont.)

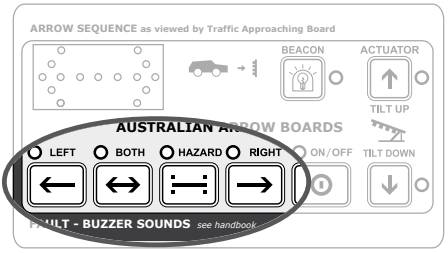


Beacons (Optional)

❶ Press once to activate beacon circuit.

(Steady on LED indicates circuit is on)

❷ Press again to turn off beacon circuit.



Arrow Sequences

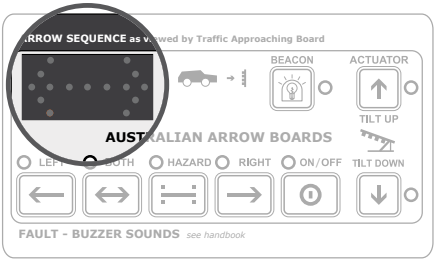
❶ Press once to activate required sequence.

(Steady on LED indicates selected sequence)

❷ Press again to turn off sequence.

or

❸ Select a different sequence by pressing desired button once.

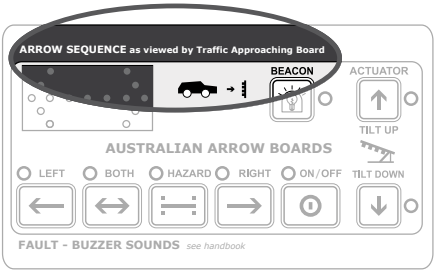


Note:

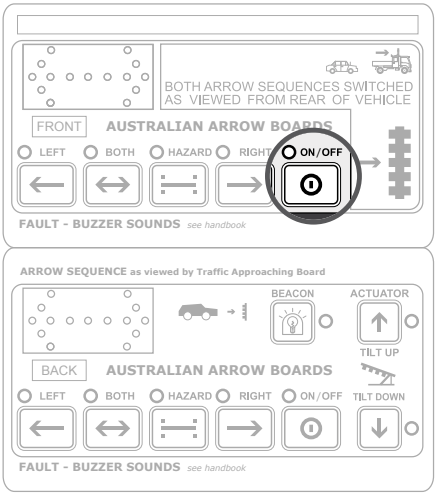
Selected sequence display flashes in real time with the corresponding lamps on the arrow board.

Caution:

Arrow sequences are shown on the display as they would be viewed from traffic approaching the board.



Operation - Double Sided



Note:

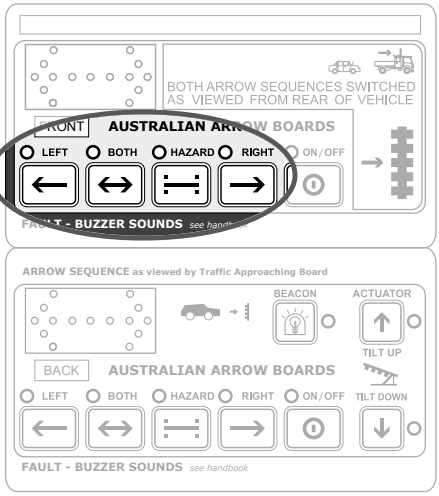
The BACK Board operation of a Double Sided board is the same as the operation of a Single Sided board.

Turn On FRONT Board

❶ Press once to activate FRONT board & the FRONT board controls.

(Illuminated LED indicates power on)

❷ Press again to turn off FRONT board.



FRONT Board Arrow Sequences

❶ Press once to activate required sequence.

(Steady on LED indicates selected sequence)

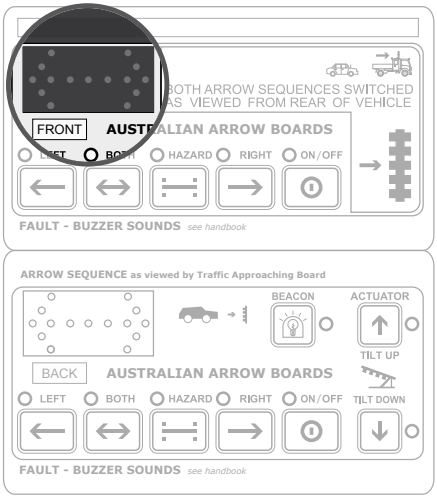
❷ Press again to turn off sequence.

or

❸ Select a different sequence by pressing desired button once.

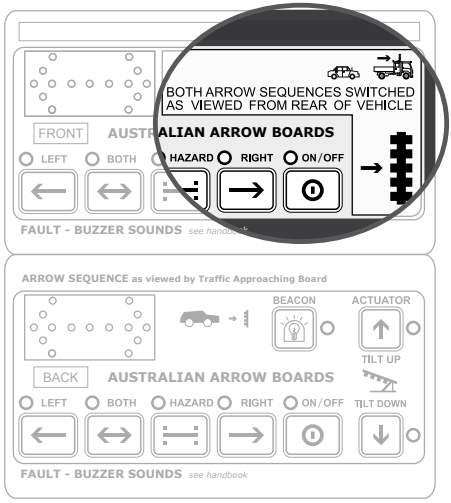
Note:

Selected sequence display flashes in real time with the corresponding lamps on the arrow board.



Caution:

Arrow sequences on the FRONT & BACK board are shown on their displays as they would be viewed from traffic approaching the rear of your vehicle.



Warranty Statement

Australian Arrow Boards products are built to exacting standards and are covered by a component replacement / repair & return warranty against faulty workmanship and/ or material components.*

5 years on lamps

Lamps will be replaced under warranty should 9 individual LEDs fail to illuminate.

2 years on electronics & hardware

Board controller & electronics, housing & mounting hardware including the optional electric actuator, will be either repaired or replaced during this period.

**Labour costs are not covered under warranty*

Caution:

There are no user serviceable components in the controller or the board.

Any repairs that are needed to wiring, connectors or internal components must be undertaken by a qualified auto electrician.

Failure to do so may void your warranty.

All Australian Arrow Boards include a range of self diagnostic capabilities built in to ensure the safe operation of your board.

The controller and the board communicate with each other once every two seconds to ensure everything is working as it should and if a fault is detected the operator will receive feedback via a buzzer within the controller.

There are 3 types of audible feedback that you may hear from the controller:

- Short fast beeps
- Long slow beeps
- Continuous buzz.

The table on the following page will allow you to determine what fault may have occurred and the steps needed to fix the problem.

Troubleshooting

Buzzer Sound	Board Condition	Controller Condition	
Fast	Arrow Sequence changes to Hazard pattern.	Arrow sequence display shows Hazard pattern.	
Fast	Arrow Board has no lamps working.	Controller switched off. No LEDs illuminated.	
Slow	Arrow Sequence missing lamp or lamps.	Arrow Sequence display has LEDs not illuminated	
Continuous	Board not fully in up or down position.	Tilt Up or Down LED flashing.	
Continuous	Board can be in any position. Currently selected Arrow Sequence remains in operation.	Tilt Up or Down LED flashing. Unable to change Arrow Sequence.	
Continuous	No lamps on board operational.	May be possible to select a different Arrow Sequence.	
Continuous	Board has switched automatically from selected pattern to Hazard pattern.	Arrow Sequence display has automatically changed from selected pattern to Hazard pattern.	
-	Board has switched automatically from selected pattern to Hazard pattern.	Controller switched off. No LEDs illuminated.	
-	Lamps dull during daylight operation.	Full functions.	
-	Lamps full brightness during night time operation	Full functions.	
-	Normal Arrow Board functions. Beacon/s not working.	Beacon indicator LED illuminated.	
-	Normal Arrow Board functions. Beacon/s not working.	Beacon LED indicator fails to illuminate when activated.	

	Fault	Action
	Power supply has reached low voltage - 11.6V.	● If vehicle is not running. Start engine to bring voltage up to normal range. ● If condition persists have electrical system checked by auto electrician.
	Power supply has reached extreme low voltage - 10.8V. ***or*** *Power supply has reached over voltage - 15.7V.*	● As Above.
	1 or more lamps corresponding with the Arrow Sequence display have a faulty connection or have failed.	● Have lamp connectors checked by auto electrician. ● If condition persists replace affected lamp/s
	Arrow Board has been obstructed during Tilt Up or Down operation. *(Power to actuator has been isolated to prevent further damage)*	● Turn board off. ● If safe, remove obstruction & turn on board.
	Short circuit detected in actuator or actuator wiring. *(Power to actuator has been isolated to prevent further damage)*	● Have wiring & connection to actuator checked by auto electrician. ● If condition persists replace actuator.
	Short circuit in lamp or lamp harness.	● Have wiring checked by auto electrician. ● If condition persists replace affected lamp/s.
	Controller and Arrow Board have lost communication. *Arrow Board has entered Fail Safe Mode.*	● Disconnect board from power. Wait a minimum of 15 seconds then reconnect power. ● If condition persists have wiring & connection checked by auto electrician, controller or control board may need replacing.
	Controller and Arrow Board have lost communication. *Arrow Board has entered Fail Safe Mode.*	● As Above.
	Light sensor obstructed or malfunction.	● Clear obstructions, dirt etc from sensor. ● If condition persists have wiring checked by auto electrician. ● If condition persists replace light sensor.
	Light sensor malfunction.	● Have sensor connector checked by auto electrician. ● If condition persists replace sensor unit.
	Beacon/s wiring or connectors damaged or beacon/s faulty.	● If beacon/s are rotating but bulbs not working, replace bulb/s. ● If beacon/s are not rotating, have wiring & beacons checked by auto electrician. ● If condition persists replace beacon/s.
	Controller malfunction.	● Turn board off. Wait a minimum of 15 seconds then turn on again. ● If condition persists have wiring & connection checked by auto electrician, controller may need replacing.

Specifications

Model Name	AAB-AB	AAB-AB-DBL	AAB-BB	AAB-BB-DBL	AAB-CB
Board Dimensions ∓ 2mm	1262mm (W) 160mm (D) 662mm (H)	1262mm (W) 270mm (D) 662mm (H)	1502mm (W) 160mm (D) 772mm (H)	1502mm (W) 270mm (D) 772mm (H)	2400mm (W) 270mm (D) 1200mm (H)
Controller Dimensions	120mm (W) 31mm (D) 69mm (H)	120mm (W) 31mm (D) 138mm (H)	120mm (W) 31mm (D) 69mm (H)	120mm (W) 31mm (D) 138mm (H)	120mm (W) 31mm (D) 69mm (H)
No. of Lamps	13	26	15	30	15 / 17 *(Facility for 2 lamps on rear of board)*
Current Draw	2.1 A	4.2 A	2.5 A	5.0 A	2.5A
Operating Voltage	11.5 - 13.5 VDC				
Weight - Board Only	16.0 Kg	18.7 Kg	21.6 Kg	25.3 Kg	80 Kg
Weight - Board including Rack & Electric Actuator	26.2 Kg	28.3 Kg	31.2 Kg	34.9 Kg	N/A
Power Harness	10 m				
Controller Harness	15 m				
Operating Temperature	-10°C to +60°C				
IP Rating - Board	IP45				
Lamp Dimming Levels	Automatic 5 levels below 1100 lx - Full brightness at 1400 lx and above				

Notes

Installation Details

Note:

This User Manual is to remain with the vehicle to which the board has been installed.

Installation Date :

Installer Name :

Address :

City :

State : Postcode :

Phone :

Fax :

Board Model :

Board Serial Number :

Options Installed

Rack Assembly : Yes / No

Electric Actuator : Yes / No

Beacons : Yes / No

Voltage Reducer : Yes / No

Vehicle Type :

Vehicle VIN :

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Australian Arrow Boards

www.roadrunnerparts.com.au

Unit 2/42-44 Whyalla Place, Prestons, NSW 2170
PO Box 314 Menai Central NSW 2234
Phone: 02 9607 5774 Fax: 02 9607 5589

Design - Supply Line (AUST) Pty Ltd